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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,884	04/16/2001	Arthur H. Sarkissian		4549

7590
04/05/2002
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EXAMINER

LAO, LUN YI

ART UNIT	PAPER NUMBER
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2673

DATE MAILED: 04/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.
09/835,884

Applicant(s)
Sarkissian

Examiner
Lao, Lun-yi

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2673



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other:

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DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the touch sensitive surface including to a touch screen, or monitor display must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "2" has been used to designate both "Key-surrounding" and "area of actuating construct".

Reference character "3" has been use to designate both "Key-surrounding" and "outermost circumference of key-surrounding".

Reference character "4" has been use to designate "an optional dividing wall(see figure 1a)", an optimum point at key surrounding area(see figure 1b)", " a point at key-surrounding exploded area(see figure 1c) and "a spring-like tubular structure(see figure 1d) and so on

Correction is required. Applicant needs to use different reference number represent different elements on the drawings.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "primary plate or primary plates";

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“channel or channels”; “ a secondary plate or secondary plates” cited in claims 3, 8 and 15-17 and a touch screen or touch screens” cited in claims 1-19 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "2" and "3" have both been used to designate “Key-surrounding”(see figure 1a, 1b). Correction is required. Applicant should not use different reference number to represented same element on the drawing.

Specification

5. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.

Claim Objections

6. The claims are objected to because the lines are crowded too closely together, making reading and entry of amendments difficult. Substitute claims with lines one and one-half or double spaced on good quality paper are required. See 37 CFR 1.52(b).

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Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of 37 CFR 1.71(a)-(c):

(a) The specification must include a written description of the invention or discovery and of the manner and process of making and using the same, and is required to be in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which the invention or discovery appertains, or with which it is most nearly connected, to make and use the same.

(b) The specification must set forth the precise invention for which a patent is solicited, in such manner as to distinguish it from other inventions and from what is old. It must describe completely a specific embodiment of the process, machine, manufacture, composition of matter or improvement invented, and must explain the mode of operation or principle whenever applicable. The best mode contemplated by the inventor of carrying out his invention must be set forth.

© In the case of an improvement, the specification must particularly point out the part or parts of the process, machine, manufacture, or composition of matter to which the improvement relates, and the description should be confined to the specific improvement and to such parts as necessarily cooperate with it or as may be necessary to a complete understanding or description of it.

The specification is objected to under 37 CFR 1.71 because the specification does not disclose a touch sensitive surface including but not limited a touch screen or monitor or display, how this touch screen or monitor display disposed in the input device and how to control this touch screen or monitor or display on the input device. The specification only disclose the touch

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sensitive surface may refer to both surface which is expose, obvious, in direct contact with the user on page 3, lines 36-38.

The specification fails to disclose “a touch sensitive surface not limited to a circular shape” as cited in claims 1-4, 8 and 12.

The specification fails to disclose “a motor or a motors are controlled by a computer and stores position of the module, modules, plate, plates, respective components thereof in its memory” as cited in claims 5-7, 9-11 and 18 and 19.

8. Claims 1-19 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

The recitation of “ a capacitive key, capacitive keys” in claims 1-4, 8 and 12 is indefinite since it is unknown that the input device has one capacitive key or more than one capacitive keys. Such limitation may be changed to “ a plurality of capacitive keys”.

The recitations of “ an hard-contact key, hard-contact keys, a pointer-navigating device, pointer-navigating devices, a trackball, a trackballs, a touch -sensitive surface or touch-sensitive surfaces including but not limited to a touch screen, a screen or monitor display, screen or

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monitor displays, a floating plural-direction pivotable key-surrounding as below, floating plural-direction pivoted key-surroundings, a key-arrangement inputting key-surrounding as below, key-arrangement inputting key-surroundings cited in claims 1-4, 8 and 12 are indefinite since it is unknown the input device has one hard-contact key or more than one hard-contact keys; one pointer-navigating device or more than one pointer-navigating devices; one trackball or more trackballs, one touch -sensitive surface or more than one touch-sensitive surfaces; a touch display or more than one touch displays and one pivotable key-surrounding or more than one floating plural-direction pivoted key-surroundings.

The limitations of “a capacitive key actuating construct, a plurality of capacitive key actuating constructs, a plural-directional hard-contact key actuating construct, a plurality of hard-contact key actuating constructs, a touch-sensitive surface, touch sensitive surfaces” cited in claims 1-4, 8 and 12 are indefinite since it is unknown the input device has one capacitive key actuating construct or a plurality of capacitive key actuating constructs; one plural-directional hard-contact key actuating construct or a plurality of hard-contact key actuating constructs; one touch-sensitive surface or more than one touch sensitive surfaces

The limitation of “as below” cited in claims 1-19 is unclear since the word “as below” has no exact meaning. Applicant need to use a clear and definite language to explain the relationship between the claim elements.

The limitation of “above” cited in claims 1-19 is unknown since the word “above” is unclear. Applicant needs to specify which element has be referred to.

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Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazarian(5,949,401) in view of Matthews(4,794,388).

Kazarian teaches a key surround module input device(68) comprising a trackball or a pointer navigating device(68a) surrounding by a plurality of hard-contact keys(68b)(see figure 1 and column 6, lines 31-35) and a touch sensitive surface including but not limited to a touch screen(see figure 1 and column 6, lines 35-49).

Kazarian fails to disclose a capacitive key. Matthews teaches an input device having a capacitive key(see figures 2-3). It would have been obvious to have modified Kazarian with the teaching of Matthews, since a capacitive key is one of touch keys.

11. Claims 5-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazarian(5,949,401) in view of Matthews(4,794,388), Bullister(6,151,012) and Engel et al(5,781,172).

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Kazarian as modified fail to disclose an input device having one plate could folding over the other plate and fail to disclose an input device having a motor.

Bullister teaches an input device having a first plate(112) can folding over a second plate(114)(see figures 1A, 1B and column 5, lines 9-12). It would have been obvious to have modified Kazarian as modified with the teaching of Bullister, so as to reducing the size of the input device and a user could simultaneously input data on the first and second plates.

Engel et al teach an input device having a motor(55, 56)(see figure 3 and column 5, lines 6-24). It would have been obvious to have modified Kazarian as modified with the teaching of Engel et al, so the movement of the input device could be controlled by a computer.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nagai teaches a pointing device is formed by a switch button, a first dial, a second dial and a body.

Suzuki teaches switches(SW1, SW2, SW3, SW4) disposed around the tack ball.

Chan teaches a plurality buttons surrounding a trackball(155).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lun-yi, Lao whose telephone number is (703) 305-4873.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached at (703) 305-4938.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

April 5, 2002

Lun-yi Lao